# This Week in SP212E:1121/3321

Always attempt to complete the readings before class. You are responsible for reading 10 pages past the current lecture. You may not understand the material completely, but you should read it prior to lecture.

Problems to submit on the date listed :

**** STUDY the chapter summary before attempting the problems ****
All multiple page assignments must be stapled in single day assignment groupings. Your name and section number must be in an upper corner of the first page.

Week of 23 Feb

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| Mon: | Be Dynamic II |
| | Read chapter 27 section 1-5 |
| Tues: | Chp 26: P 25, 26, 41, 43, 45 |
| | Lab: Kirchoff's Rules |
| | Complete prelab and bring the lab instructions. |
| Wed: | Chp 26: Q11, Q20; P 83 |
| Fri: | Chp 27: Q2, Q5; P1, 6, 10, 14 |

Week of 01 Mar

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|---|---|
| Mon: | Chp 27: P 15, 23, 36, 52, 53 |
| Tues: | Submit Kirchhoff Lab Report; complete LabQuiz |
| | Lab: Magnetic Force !!! An excellent experience. |
| | Complete prelab and bring the lab instructions. |

HOUR EXAM II ----- planned for 23 March ! Ugly, but necessary !

Q: question P: problem A: statement on this assignment sheet

Hints: 27:P11 Integrate equation (27-4). As the path lies in a plane, $d\vec{\ell} = dx\,\hat{i} + dy\,\hat{j}$. The magnetic field is uniform and perpendicular to the plane so $\vec{B} = B_0\,\hat{k}$. Do not actually compute any cross products. Just pull all constants (including constant unit vectors) out of the integrals. Set the limits to $(x_a, y_a)$ and $(x_b, y_b)$. Complete the integrals. The result only depends of the endpoints of the path. If the field is uniform, the path need not be in a plane in order that the result to be true. $\vec{F} = I(\Delta x\,\hat{i} + \Delta y\,\hat{j} + \Delta z\,\hat{k}) \times \vec{B}$ or $\vec{F} = I(\vec{L}) \times \vec{B}$ as long as $\vec{B}$ is uniform.

Series: Same charge (or current) and potential changes add
Parallel: Same potential difference and charges (currents) add

A1